

Work Order ID 60645

Thursday, July 15, 2010 11:32:24 AM



Page 1

Item ID: D3947-1

Accept



Setup Start



Revision ID:

Stop



Item Name: Panel, Upper LH Post

Start Date: 7/15/2010 Start Qty: 1.00



Cust Item ID:

Required Date: 7/22/2010 Req'd Qty: 1.00

Customer:

Reference:

Approvals:

Process Plan:

[Signature]

Date:

10-7-15

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D3947

A

100

0.00



HAND FINISHING THERMOFORMING

HandThermo

Memo

0.00

Hand Finishing Thermoforming

Cut Blanks to fit frame size

(X) BB
10/07/19

105

0.00



Dry Material

HandThermo

Memo

0.00

Hand Finishing Thermoforming

Dry Sheet as per QSI022 POLYCARBONATE

Temp: 240F

Time IN: 4:30 PM 10/07/18

Time OUT: 7:00 AM 10/07/19

(X) BB
10/07/19

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 60645

Thursday, July 15, 2010 11:32:24 AM

Page 2

Item ID: D3947-1

Accept

Setup Start

Revision ID:

Stop

Item Name: Panel, Upper LH Post

Start Date: 7/15/2010 Start Qty: 1.00

Cust Item ID:

Required Date: 7/22/2010 Req'd Qty: 1.00

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

110



Thermoform

Thermoforming Machine

THERMOFORMING MACHINE

Memo

1-Machine Set-up

2-Pre-heat tool

3-Thermoform as per Dwg. D36476-1 and Folio FTA 044 using tool DT9483

Dwg. Rev. AFolio Rev. B

0.00

0.00

(X) B
10/07/19

120



QC

Quality Control

QC2- Inspect parts off machine FAI/FAIB

Memo

Visually inspect for proper formation of each part

0.00

0.00

(X) B
10/07/19

130



QC

Quality Control

QC8- Inspect parts - second check

Memo

0.00

0.00

O B
10/07/19

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 60645

Thursday, July 15, 2010 11:32:24 AM

Page 3

Item ID: D3947-1

Accept

Setup Start

Revision ID:

Stop

Item Name: Panel, Upper LH Post

Start Date: 7/15/2010 Start Qty: 1.00

Cust Item ID:

Required Date: 7/22/2010 Req'd Qty: 1.00


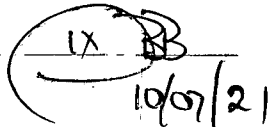

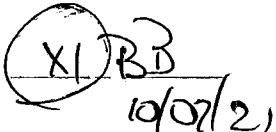

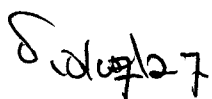
Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start

Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
140  Thermoform Thermoforming Machine	HAND FINISHING THERMOFORMING Memo Trim to Finished Dimensions as per dwg D3946-1	0.00 0.00							
150  QC Quality Control	QC2- Inspect parts off machine FAI/FAIB Memo Check dimensions to ensure conformity to drawing tolerances.	0.00 0.00							
160  QC Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00 0.00							

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 60645

Thursday, July 15, 2010 11:32:24 AM

Page 4

Item ID: D3947-1

Accept

Revision ID:

Item Name: Panel, Upper LH Post

Setup Start

Stop

Start Date: 7/15/2010 Start Qty: 1.00

Required Date: 7/22/2010 Req'd Qty: 1.00

Cust Item ID:

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

170

Identify as per dwg & Stock Location: *ISO*

0.00



Packaging

Memo

0.00

Packaging

10-7-27 *(K)*

180

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

10/07/28 *(J)*
10-7-28 *(D)*

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Thursday, July 15, 2010 11:32:30 AM

Page 1

Work Order ID: 60645

Parent Item: D3947-1

Parent Item Name: Panel, Upper LH Post

Start Date: 7/15/2010

Required Date: 7/22/2010

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP RevA: New issue DD verified by:EC
Add Step 105 Dry Material 10/04/21 DL

IPP RevB

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
MLEXS.093-F6006-07		Purchased	No			100	sf	1,876.541	3.3055	3,479.474			



GE PLASTICS LEXAN SHEET



Location

Loc Qty

Loc Code

therm

1876.541

107574

13.72

111973

30.875

112176

101.2267

114459

1730.7193

(X1)

BB
10/07/19

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action - Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order:	60645
Description: Panel, Upper LH		Part Number:	D3947-1
Inspection Dwg: D3947	Rev: A	Page 1 of 1	

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

THERMOFORMING SECTION

Description	Accept	Reject	Method of Inspection	Comments
Inside Radii less than "	✓			
Shape Definition	✓			
Texture Retention	✓			
Material imperfections such as bumps, cracks, voids, scratching	✓			

Measured by: JB

Date: 10/07/21

TRIMMING SECTION

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
10.0	Min	10.075	✓			
0.2	Min	.291	✓			
0.5	Min	.558	✓			
1.8	Min	1.887	✓			
3.1	REF	3.375	✓			
26.6	REF	26.875	✓			
0.050	Min	.058	✓			
0.070	Min	.076	✓			

Measured by: JB

Date: 10/07/21

Audited by: JB

Date: 10.07.21

Prototype Approval: N/A

Date: N/A

Rev	Date	Change	Revised by	Approved
A	09.09.15	New Issue	KJ	<u>JB</u>

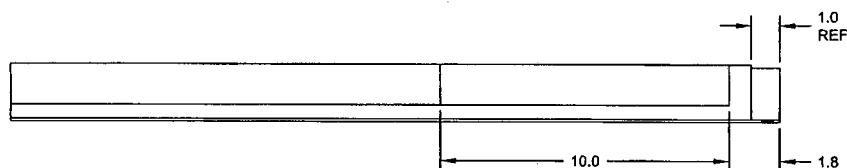
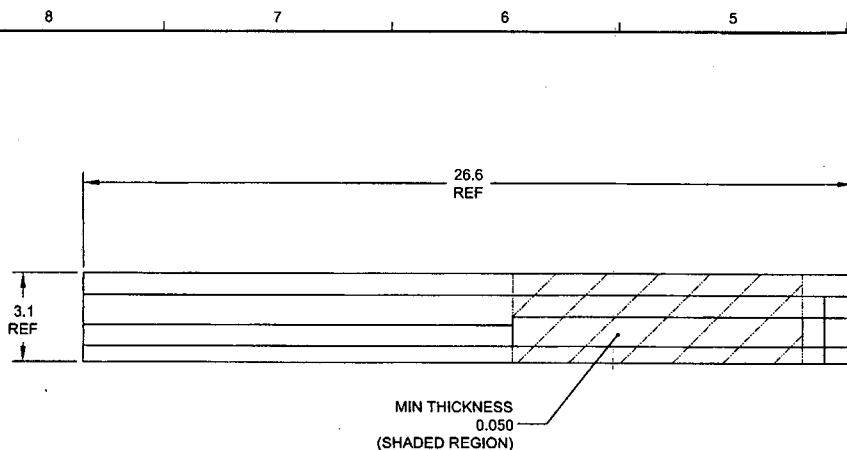
W/O:			WORK ORDER CHANGES					
DATE	STEP		PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

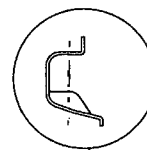
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:			WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP		Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
				Initial Chief Eng	Action Description Chief Eng	Sign & Date			

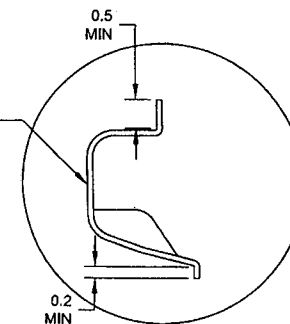
NOTE: Date & initial all entries



D3947-1 PANEL, LH



DETAIL A C2-1



DETAIL A C3-1
SCALE 2X

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. *60645*
PS 10-7-15

RELEASED
09/05/20

NOTES:

- 1) MATERIAL: F6006 SUEDE/POLISHED GY5B133 LIGHT GREY LEXAN SHEET 0.093 THICK
REF DART SPEC MLEXS.093-F6006-07
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3947-1" AND B/N USING VIBRATING STYLUS
- 7) WEIGHT: 0.42 lbs
- 8) TOOLING: THERMOFORM PER MOLD DT9483 PER DART QSI 022. TRIM PER MOLD
- 9) MINIMUM THICKNESS: 0.050" ON FLANGES AND 0.070" ELSEWHERE

REV.	NEW ISSUE	DESCRIPTION	PH	09.05.20
DESIGN			BY	DATE
DRAWN				
CHECKED				
MFG. APPR.				
APPROVED				
DE APPR.				
DATE	09.05.20			

DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	REV. A
DRAWING NO. D3947	SHEET 1 OF 4
TITLE PANEL (AS 350/355)	SCALE NTS

COPYRIGHT © 2009 BY DART AEROSPACE LTD
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

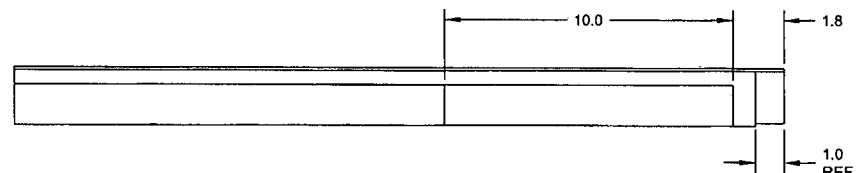
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

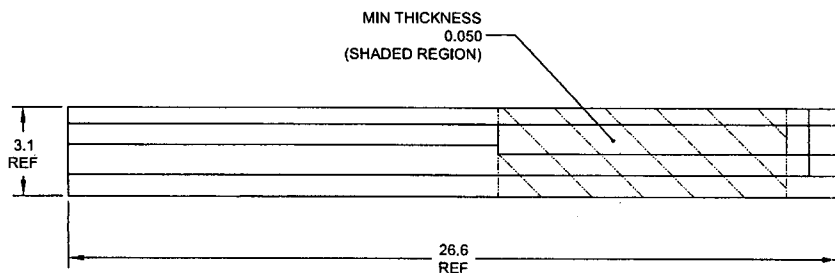
NOTE: Date & initial all entries

8 7 6 5 4 3 2 1

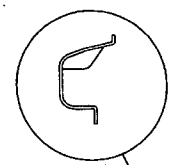
D



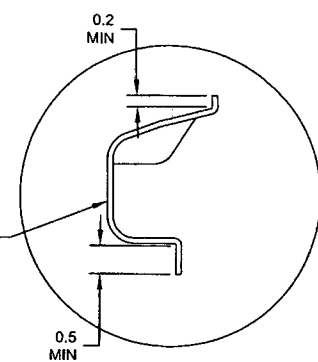
C



D3947-2 PANEL, RH



DETAIL B C2-2



DETAIL B
SCALE 2X

RELEASED
9/26/14 MD

NOTES:

- 1) MATERIAL: F6006 SUEDE/POLISHED GY5B133 LIGHT GREY LEXAN SHEET 0.093 THICK, REF DART SPEC MLEXS.093-F6006-07
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3947-2" AND B/N USING VIBRATING STYLUS
- 7) WEIGHT: 0.42 lbs
- 8) TOOLING: THERMOFORM PER MOLD DT9483 PER DART QSI 022. TRIM PER MOLD
- 9) MINIMUM THICKNESS: 0.050" ON FLANGES AND 0.070" ELSEWHERE

DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO. D3947	REV. A
MFG. APPR.			SHEET 2 OF 4
APPROVED		TITLE	SCALE
DE APPR.		PANEL (AS 350/355)	NTS
DATE	09.05.20	<small>COPYRIGHT © 2009 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD</small>	

8 7 6 5 4 3 2 1

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

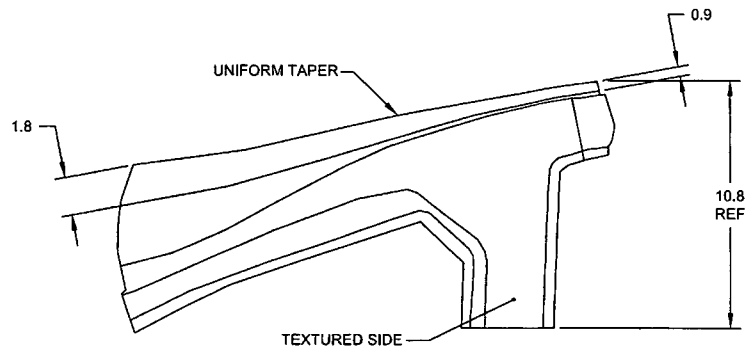
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

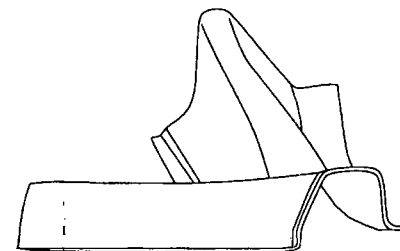
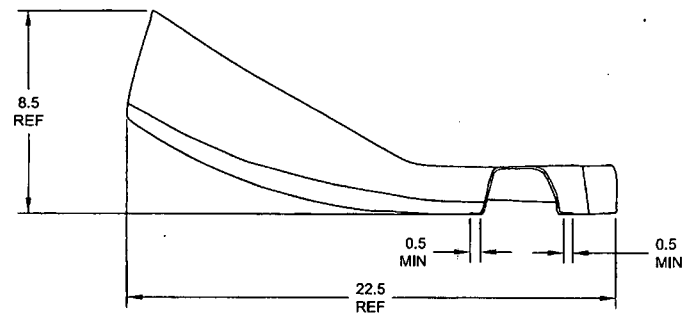
8 7 6 5 4 3 2 1

D



C

B



D3947-3 PANEL, LH

RELEASED
09/06/14

WLB 00045

NOTES:

- 1) MATERIAL: F6006 SUEDE/POLISHED GY5B133 LIGHT GREY LEXAN SHEET 0.093 THICK
REF DART SPEC MLEXS.093-F6006-07
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3947-3" AND B/N USING VIBRATING STYLUS
- 7) WEIGHT: 0.55 lbs
- 8) TOOLING: THERMOFORM PER MOLD DT9484 PER DART QSI 022. TRIM PER MOLD
- 9) MINIMUM THICKNESS: 0.050" ON FLANGES AND 0.065" ELSEWHERE

DESIGN	90	DART AEROSPACE LTD	
DRAWN	PH	HAWKESBURY, ONTARIO, CANADA	
CHECKED	90	DRAWING NO.	REV. A
MFG. APPR.	90	D3947	SHEET 3 OF 4
APPROVED	90	TITLE	SCALE
DE APPR.	90	PANEL (AS 350/355)	NTS
DATE	09.05.20	COPYRIGHT © 2009 BY DART AEROSPACE LTD	
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD			

8 7 6 5 4 3 2 1

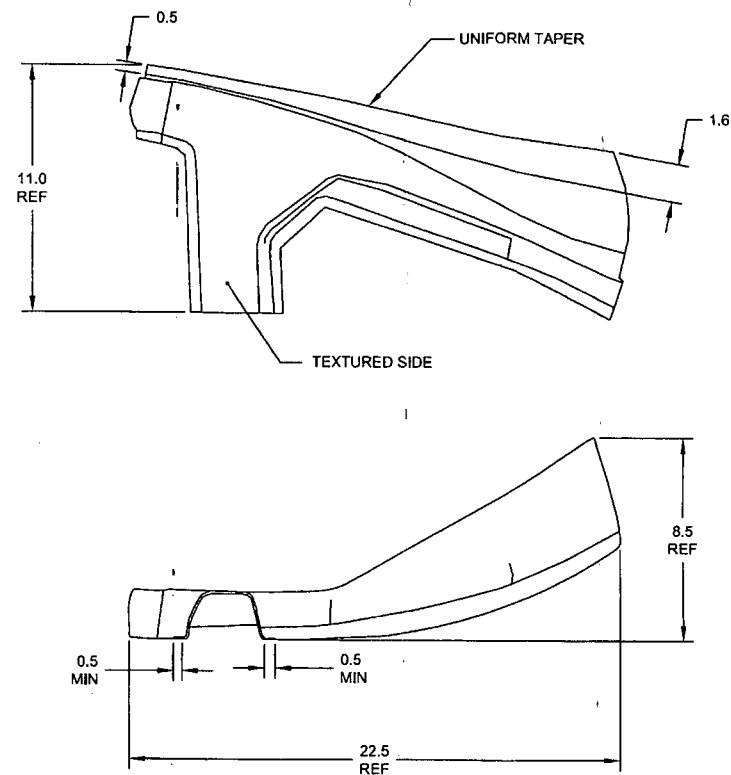
W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



D3947-4 PANEL, RH

NOTES:

- 1) MATERIAL: F6006 SUEDE/POLISHED GY5B133 LIGHT GREY LEXAN SHEET 0.093 THICK
REF DART SPEC MLEXS.093-F6006-07
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3947-4" AND B/N USING VIBRATING STYLUS
- 7) WEIGHT: 0.62 lbs
- 8) TOOLING: THERMOFORM PER MOLD DT9484 PER DART QSI 022. TRIM PER MOLD
- 9) MINIMUM THICKNESS: 0.050" ON FLANGES AND 0.065" ELSEWHERE

who 60645

RELEASED
09/05/20

DESIGN	<i>JP</i>	DART AEROSPACE LTD	
DRAWN	<i>JP</i>	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>JP</i>	DRAWING NO.	REV. A
MFG. APPR.	<i>JP</i>	D3947	SHEET 4 OF 4
APPROVED	<i>JP</i>	TITLE	SCALE
DE APPR.	<i>JP</i>	PANEL (AS 350/355)	NTS
DATE	09.05.20	<small>COPYRIGHT © 2005 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries